ENGINEERING NEWS-RECORD

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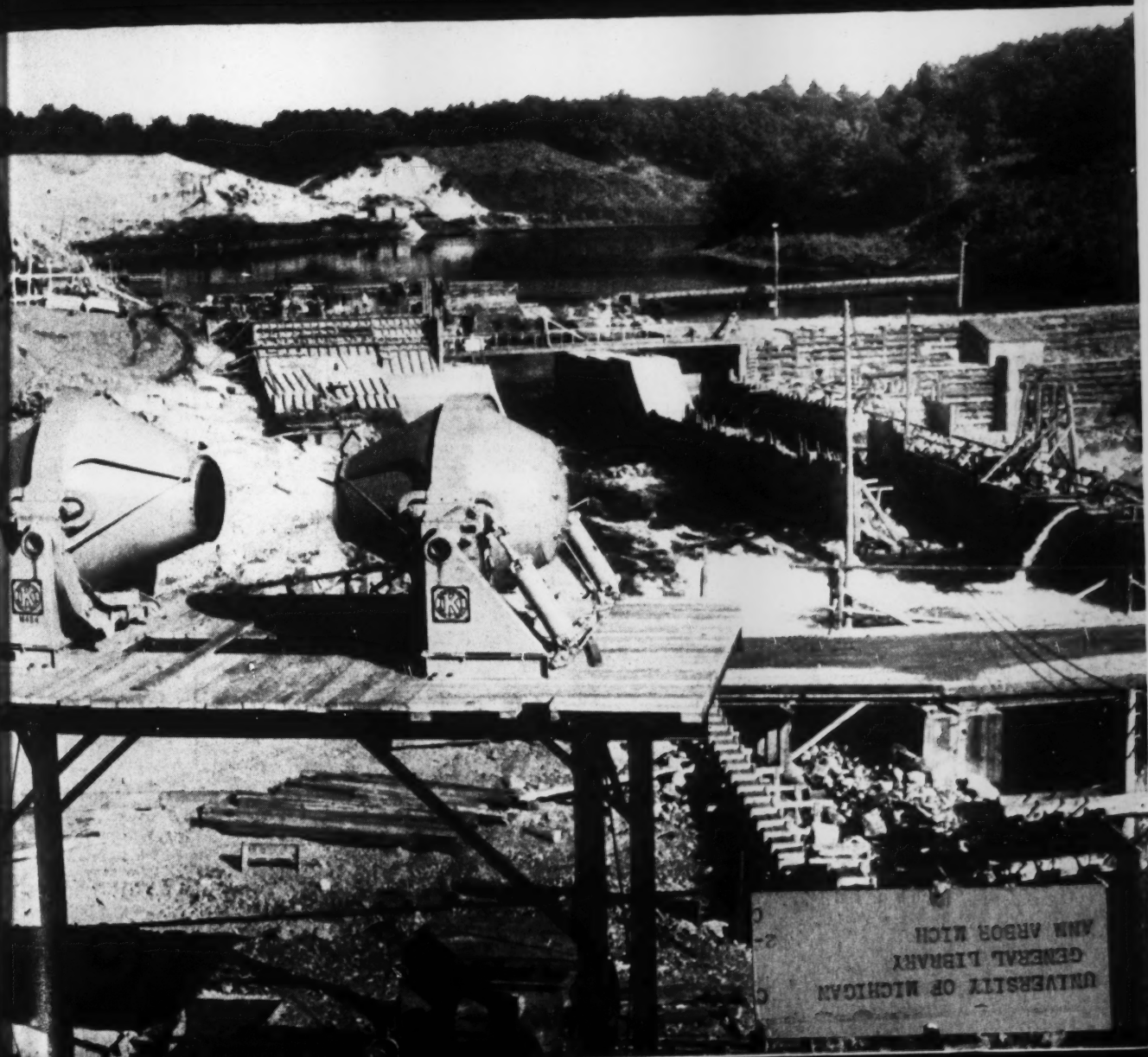

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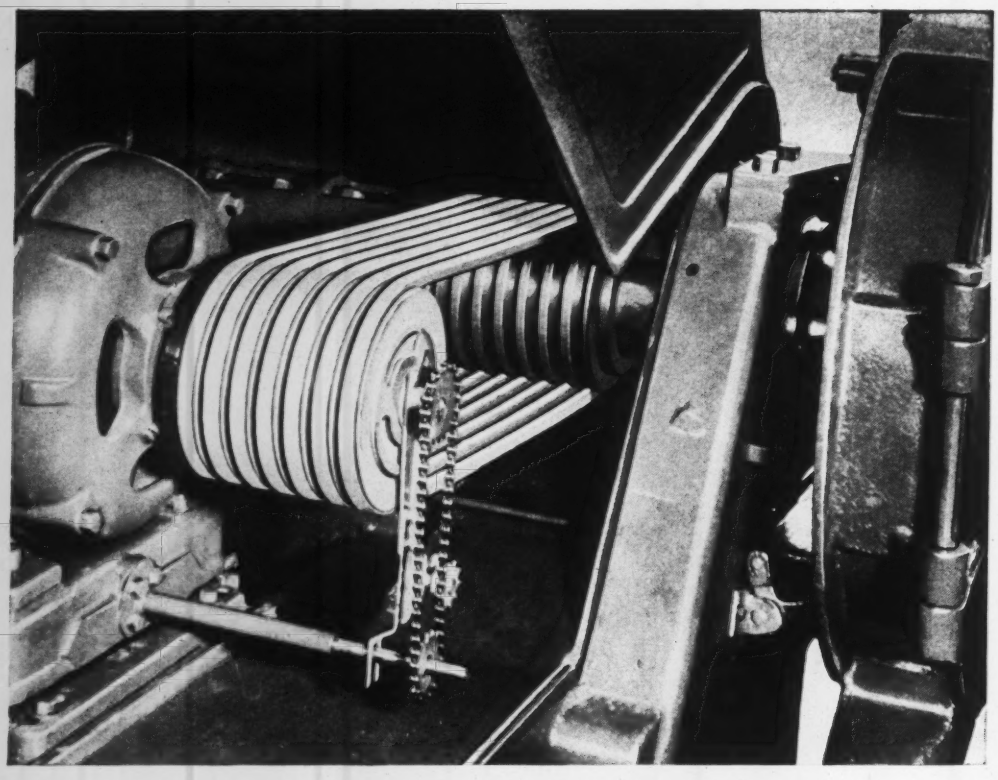

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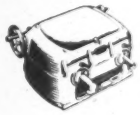

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News of the Week

ENGINEERING NEWS-RECORD • OCTOBER 23, 1947 • VOLUME 139 • NUMBER 17

ASCE dues raise defeated; directors curtail activities

American Society of Civil Engineers cuts expenses to reach balanced budget—Participation in world affairs urged at Jacksonville, Fla., meeting

The defeat of a proposed amendment to the society's constitution calling for an increase of $5 in yearly dues for corporate members and other adjustments in membership fees will force the curtailment of some activities, of the American Society of Civil Engineers, it was disclosed last week.

Gathered at Jacksonville, Fla. for the annual fall convention society members were informed that the amendment had been defeated, and the Board of Direction coupled the announcement with the statement that "some phases" of the program planned for next year would be postponed.

At the same time, it was reported that the membership had approved an amendment enfranchising junior members.

In reporting out a revised budget calling for expenditure of $710,000 during the fiscal year that started Oct. 1, fiscal officers pointed out that the current society budget was originally adopted by the board with the proposed increased dues in mind. Last year, the board laid down a program and adopted a budget that indicated a deficit at the end of the year, in the belief that society activities should not be curtailed to meet rising costs, until it was known what action the membership would take on the proposal to increase dues.

Savings in the expenses of the society will be obtained, it was reported, by reducing the allotment to local sections in accordance with a new formula, cutting travel of employees of the society, and by other reductions.

Meanwhile, expressing confidence that the membership will take necessary steps to increase income once the society's financial situation is understood, the board adopted a resolution calling for the creation of a "loyalty fund", and appealing to members to contribute to this fund until the income can be increased to meet essential needs.

Opening sessions of the 4-day meeting placed great emphasis on the engineer's stake in world affairs, and the need for engineering advice to straighten out the muddled relations between nations.

Urge world outlook

Malcolm Pirnie, New York consulting engineer and a past president of the society, told members that the profession faces a challenge "to do its part in improving the welfare of the peoples of the world." Citing the work done by engineers on industrial disarmament reports on Germany and Japan, Mr. Pirnie said: "We can raise our sights . . . to include the applied scientists of all nations. We have a common language and mental approach to our problems. If we can find ways to work together, the products of our effort will draw increasing numbers to the cause of freedom."

E. M. Hastings, society president, urged U. S. engineers not to be content to wait "for political diplomats" to solve the problems. "We must put our talents to work and enter . . . into the tasks of democracy that are now before us," he said.

Structural division

The discussions of both sections of the structural division were devoted to structural timber and improved methods of testing and using this material.

Improved forestry and processing methods insure an ample supply of lumber, according to Frank J. Hanrahan, chief engineer of the National Lumber Manufacturers Association, who also reported that detailed standards are now being developed for glued-laminated structures. R. P. A. Johnson, chief, timber mechanics, Forest Products Laboratory, reported on new tools offering aid in the testing and evaluating of lumber, including an electric strain gage for measuring fatigue, and an accelerated loading machine.

When testing built-up members, the new strain gage will permit 50 stress

(Continued on page 3)

National Housing Council—*Members of the National Housing council pose for a group photograph at their first meeting in Washington, D. C. Seated, left to right, are: John F. Fahey, chairman, Home Loan Bank Board; Raymond M. Foley, Housing administrator and chairman of the council, and F. W. Kelsey, Veterans Administration. In rear rank, second from left, is Franklin Richards, Federal Housing Administration commissioner.*

NEWS IN BRIEF

In telegraphic form, here are latest news developments on the engineering and construction front during the week.

Industrial Construction — Construction has started on the five-story, $1,000,000 addition to the Indiana Bell Telephone Co's administration building in *Indianapolis, Ind.* Leslie Colvin is general contractor and Alden Meranda, architect . . . Canadian Cement Co. will build a $1,000,000 addition to its plant at *Exshaw, Alta.* . . . Contracts totalling $2,765,000 have been awarded by the Port of Seattle for construction of an administration building at *Seattle-Tacoma* airport . . . . Construction has started on the $1,600,000 Morehead building and planetarium at the University of North Carolina, *Chapel Hill, N. C.* . . . A 24-story office building is to be built in *Tulsa, Okla.*, by the First National Bank and the Sun Ray Oil Corp. . . . An 11-story addition to the Jefferson-Clinton Hotel in *Syracuse, N. Y.*, to be erected at a cost of about $400,000, will provide 107 additional rooms . . .The Chicago and North Western Railway Co. has contracted with the S. N. Nielsen Co. for a large diesel locomotive servicing and repair shop at *Chicago, Ill.* Cost will be about $1,800,000 . . . Del E. Webb Construction Co. will build a 14-story, 424-room hotel at *Tucson, Ariz.*, to cost about $2,000,000.

Public Construction—Voters of the Santa Clara Valley Water Conservation District have approved a $2,500,000 bond issue for the construction of Lexington Dam near *San Jose, Calif.* . . . A $1,000,000 hospital building will be erected at *Fairfield, Ill.* . . . *Moline, Ill.*, plans a $10,000,000 school building program . . . Work is progressing rapidly on the U. S. Army bomber base at *Limestone, Me.* Lane Construction Co. and T. W. Cunningham Co. of Bangor, have been awarded contracts of $12,800,000 on a cost-plus-fixed-fee basis, with an additional $750,000 set aside for land acquisition . . . Work is to start soon on a $400,000 medical clinic building at *St. Joseph, Mo.* . . . H. M. Baruch Corp. of Los Angeles has a $977,000 contract for the Luther Burbank Junior High School at *Burbank, Calif.* . . . Construction is to start soon on a new $1,790,000 St. Louis County court house at *Clayton, Mo.* Voters in *Columbiana County, Ohio,* and its subdivisions will vote on 32 projects, seeking $3,015,000 in bond issues and 56.1 mills in tax levies, at the Nov. 4 election.

Power Construction — The second generating unit in the new De Cew Falls power station of the Ontario "Hydro", near *St. Catherines, Ont.*, was set in operation Sept. 26, just four years after the first unit was put on the line. The new unit will generate 70,000 hp. at 25 cycles under a head of 254 ft. Its installation involved construction of a new steel and concrete penstock down the face of the Niagara escarpment. . . . A proposed $380,000 bond issue for construction of a new municipal electric power plant and distribution system will be voted on Nov. at *Paola, Kan.* . . . The Missouri Utilities Co. awarded a contract to J. F. Pritchard & Co., Kansas City, Mo., to design and construct a 7500-kw steam-electric power plant to be erected near *Oran, Mo.* The plant, including the turbogenerator, will approximate $2,000,000 in cost.

Housing—An 89-unit apartment project in 18 two-story buildings is proposed at *West Palm Beach, Fla.*, to be known as the Garden Lane Apartments . . . The housing authority of *Toronto, Ont.*, has approved plans for the type of housing to be constructed by the city under the Regent Park housing development scheme. In this proposed civic project 1,076 family suites will be located in the area from Parliament St. to River St., bounded on the north by Gerrard St. and on the south by Dundas St. A central community building would provide indoor recreational activities, with park and playground areas included in each section.

THE COVER PICTURE

Major concreting operations on the Central Maine Power Company's Union Falls Dam on the Saco River in southern Maine awaits delivery of the bin structure.

Some 50,000 cu.yd. of concrete will be mixed through two 2 cu.yd. tilting mixers and delivered by pumps to the dam.

About 6,000,000 cu.yd. of earth is being placed at the abutment of the structure. Two 12,000 kva. units, operating at 75 ft. head, are expected to produce 75,000,000 kw. annually. Cost of the project, being built by the Sanders Engineering Co. of Portland, is about $3,700,000.

Utah orders inspection of school structures

All district education boards in Utah have been requested by E. Allen Bateman, state superintendent of public instruction, to obtain experienced engineers to check safety margins of school buildings, particularly those in which reinforced concrete beams are used.

The request is an aftermath of the collapse of the roof at the West Jordan school, near Salt Lake City, where several hundred pupils narrowly escaped injury. (*ENR* Oct. 16, vol. p. 509).

"If reports of architects or inspectors during construction of any building indicate difficulty was experienced in getting the contractor to comply fully with specifications, the local board of education should have competent engineers examine the building," Dr. Bateman said.

High costs balk building at University of Arizona

High construction costs have blocked a $1,000,000 project at the University of Arizona, Tucson, where the board of regents rejected all bids on two dormitories upon learning that the lowest, $975,000, figured to $13.85 per sq. ft.

The regents said accepting the bid would not allow for furnishing the buildings from a $1,000,000 bond issue voted to complete the project.

Labor pirating which ran up wages was seen as one major cause for the high construction costs. This was especially true for bricklayers as wages have been up as high as $30 per day against the union scale of $16. An eagerness to complete homes and commercial building before an influx of winter visitors was held partially responsible.

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ASCE members defeat raise in dues

(Continued from first page)

readings in less than two minutes.

Waterfront timber structures may be built to give long service and be so constructed that fire hazards are greatly minimized, Ralph H. Mann of the Wood Preservers Association, reported. Three basic factors must be considered, he said: The species of wood being used and its physical characteristics; the preservative used, and the final net retention of the preservative in the wood in pounds per cubic foot.

Two other papers that attracted much interest were those dealing with the extensive study and research that has been carried out better to evaluate the effectiveness of the use of connectors at the joints of timber structures. One dealt with the stress distribution about split-ring connectors, and was prepared by A. G. H. Dietz and Frank J. Mehringer, both of Massachusetts Institute of Technology. The second dealt with full-scale tests on timber frames built with connectors (*ENR* Sept. 18, vol. p. 386) and was read by J. H. Carr Jr., secretary of the Timber Engineering Co., Washington, D. C.

Other papers presented at the session included a description of German designs for using small timber sections, presented by E. George Stern, of Virginia Polytechnic Institute; and a call for better wood technology courses in U.S. engineering schools, by Howard J. Hansen, of the University of Florida.

Highway planning

During the last year, a new type of highway traffic survey has been developed, and gives promise of widespread and effective application, according to E. H. Holmes, of the Public Roads Administration.

Addressing a joint session of the City Planning and Highway divisions, Mr. Holmes said the survey involves a combination of questioning drivers entering or leaving an area, and questioning them when they park their cars, to obtain information as to travel needs of road users.

Traffic studies and surveys that resulted in the adoption of a $34,500,000 inter-state highway plan for Jacksonville, Fla., were described by W. M. Parker, division engineer for the Florida State Road Department. By means of simplified and brief reports on the studies made, greater public understanding was obtained, accompanied by endorsement of the program, even though it calls for two toll bridges across the St. Johns River, Mr. Parker said.

Mr. Parker sounded a warning to planners of "by-pass" highways with the statement that the survey at Jacksonville showed that only 3,100 trips of a total of 55,900 recorded were classed as "by-passable." Other speakers at the highway session included J. M. Picton, chief planning engineer, Kansas City, Mo.; and Charles M. Upham, engineer director of the American Road Builders Association.

Sanitary division

Addressing one of two full sessions of the Sanitary Engineering division, Mr. Pirnie and his associate, Richard Hazen, described water supply facilities of a number of cities in the southeast.

A plant now being built to recover the lime used to soften Miami's water, and which will permit an annual saving of $84,000 to the city, was described by C. F. Wertz of the Miami Department of Water and Sewers. Costing over a half-million dollars, the plant will include a rotary kiln of 6-ft. internal diameter and 230 ft. long, with a capacity to produce 80 tons of lime per day from 35 percent moisture cake. A detailed description of this plant will be given in this journal at a later date.

The use of seawater for regenerating zeolite water treatment plants is proving satisfactory at three Florida cities, C. E. Richeimer, of Jacksonville, reported.

The sanitary cooperative program of the U. S. with Latin-American countries was said, by Clarence Sterling, Office of Inter-American Affairs, to be so successful that the southern republics are now putting up by far the largest part of the cost of the program.

Other speakers included W. W. Gillespie, of Jacksonville; David B. Lee, chief sanitary engineer of the Florida State Board of Health, and C. D. Williams of the University of Florida. W. A. Moggio, field engineer for the National Council for Stream Improvement, described his organizations activities.

Waterways division

The single session of the Waterways division was devoted to a symposium on tidal rivers. Speakers at the session included: Ralph F. Rhodes, of the Savannah Ga., office of the Corps of Engineers; Henry B. Simmons, of the Waterways Experiment Station, Vicksburg, Miss.; and Harold A. Scott, of the Jacksonville office of the Corps of Engineers.

The symposium closed with a discussion by C. A. Wicker of the Philadelphia office of the Corps of Engineers on tidal studies pertaining to the Delaware River.

Construction division

Lower building costs must be obtained, or the construction industry—already under fire, will "lose the greatest opportunity in its history", R. H. Tatlow III, president of the Abbott Merkt and Co., of New York City, told the Construction division.

"The industry must demonstrate that it could not only perform miracles in wartime, but that it can pitch in and solve today's problems," Mr. Tatlow said. Continuing his address, he outlined plans for the newly-formed Building Research Advisory Board, and appealed for extended research into labor-saving devices.

A joint paper, presented by G. B. Hills, consulting engineer of Jacksonville, and Charles F. Lovan, Jacksonville contractor, called for the use of clear, precise specifications to reduce the contractors risk and make it unnecessary for bidders to allow for maximum conditions that seldom develop.

Construction of a $6,000,000 causeway between Miami and Key Biscayne was discussed by E. M. Rader, Dade County engineer.

To cut a pilot channel in Yakima River slide

Emergency funds for excavating a pilot channel through the slide area on the Yakima River near Cle Elum, Wash., (*ENR* Sept. 25, vol. p. 422) have been requested by Col. L. H. Huwitt, Seattle district engineer. The slide buried railroad tracks and diverted the river from its former course.

By cutting a pilot channel through the gravel bar now occupied by the river, the backwater above the slide will be lowered. Materials taken from the excavation will then be used to make a diversion structure.

Forbids "off hours" work by S.C. road employees

A ruling of interest to state and municipal officers and employees has been made by C. R. McMillan, chief highway commissioner of South Carolina. He has forbidden department employees to accept "off hours" employment except on written approval and only on condition that any remuneration be turned in to the department.

Mr. McMillan said that when he became commissioner last July he found a number of employees, particularly in the drafting department doing outside work.

DEVELOPMENTS BEYOND U. S. BORDERS

Digested from reports by Engineering News-Record correspondents and the McGraw-Hill World News Bureau

Mexico puts emphasis on airport construction—Reveal 5-year plan for revamping of Moscow—Sydney, Australia plans reconstruction of port works—Fuel-saving plans in England

Mexico—Under orders of President Miguel Aleman, Mexico is giving special emphasis to a program of civil airport construction that will call for the expenditure of many millions of dollars in the next five years.

Biggest single job is a $6,000,000 central airport for Mexico City, plans for which were approved recently by a presidential committee, after being prepared by the Ministry of Communications and Public Works.

Construction will be carried forward in five phases of a year each, so that completed units can be put into service successively. A committee including representatives of the Ministry of Communications, Finance and the Interior, and the Mexico City government and businessmen, will consult on final plans.

Meanwhile, the communications ministry, determined to eliminate the necessity of using airports on the U. S. side of the border for air travellers in northwestern Mexico, has authorized the start of construction programs at Tijuana and other border cities.

Argentina—The Argentine Ministry of Public Works has called for bids for construction of six hangars, using 90-meter-span, reinforced concrete arches, at the $7,750,000 Ezeiza airport, now under construction south of Buenos Aires. Full plans and methods of submitting bids—which will be opened Dec. 31—are available from Argentine missions now operating in Washington and New York City.

Transport . . . .

Argentina—The Ministry of Public Works has announced plans for $75,000,000 worth of general construction work to improve transport facilities, in what was said to be a move to attract important construction organizations to work in Argentina.

The extensive program, some of which will be ready for bids within six months, according to the ministry, will include:

A $25,000,000 vehicular tunnel under the Riachuelo River, to carry a 6-lane highway; a 30-mile coastal canal for vessels having a draught of 14 ft, to connect Puerto Nuevo and Parana de las Palmas, to cost about $25,000,000, and the purchase of some $25,000,000 worth of dredging equipment for work on canals and other waterways. Another project announced at the same time was construction of $75,000,000 worth of aqueducts to serve Cordoba, Santiago del Estero and Pampa.

England—Seeking to improve the appearance and utility of its stations, the Great Western Railway recently adopted a policy calling for repainting and rehabilitating all stations; installing station nameboards at eye-level and lettered in colors for easy reading; limiting advertising billboard use to prevent interference with necessary directional signs and instructions.

Reconstruction . . . .

Russia—About $90,000,000 has been earmarked for a five-year plan to reconstruct war-damaged sections of Moscow and to change the city's aspect to that of a modern metropolis.

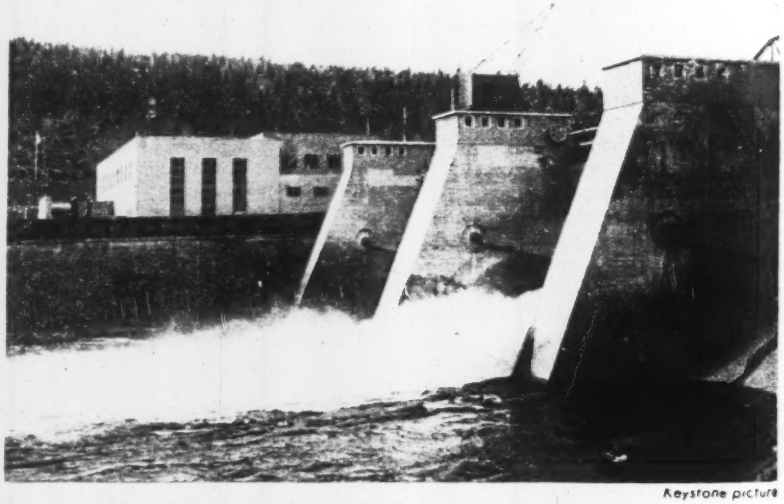
According to D. Chechulin, city architect, the construction program will include the building of eight tall buildings—one a 32-story, two 26-story and five 16-story structures; construction of some 100,000 housing units for that part of the city's 4,000,000 population still forced to live in shattered shelters or with other families; construction of new factories to house machine-tool and automobile industries, and extension of both surface and underground transit facilities.

The program envisages the growth of the city from its present 127 sq.mi area to about 211.3 sq.mi., the architect said. New boulevards for motor traffic, new wharfage facilities along the Moskava River, and substantial enlargement of the city's air terminal facilities are also planned.

Ports and Harbors . . . .

Australia—Construction of three modern concrete piers to replace six obsolete jetties, is part of the Darling Harbor reconstruction plan announced recently by the Sydney Harbor Trust.

While the existing jetties are at right angles to the shoreline, the new piers will be inclined at a slight angle to gain greater docking space without increasing obstruction to traffic. An overhead



Keystone picture

***For Swedish Power**—The new Swedish power station at Solleftea, damming the Angerman River, was recently put in service by the Swedish government. Under construction since 1944, the structure is the first of a series of such installations planned along the river in north-central Sweden, about 190 miles due north of Stockholm. The station has an installed capacity of 55,000 kw., and is one of the smaller units to be built in the development.*

roadway will be constructed to serve the piers and to clear traffic on waterfront streets.

Concrete piles will be cast at the site to support the structure, which will have concrete decks capable of supporting a live load of 5 cwt. per sq. ft.

Venezuela—The Venezuelan government has announced it will spend about $3,000,000 for improvements at the Port of Maracaibo.

Power . . . .

France — The giant 300-ton transformer for Genissiat Dam in southeast France, loaded on a specially-built, 96-wheel truck trailer for transport from the factory at Grenoble to the dam site, was stuck for two days in a motor tunnel near Aix-Les-Bains.

Previous calculations had indicated that the transformer could squeak through the tunnel with a 2-inch margin to spare. But when the trailer got about halfway through, it began to scrape the top of the bore. Engineers ordered the tunnel's steel lining melted down in spots with blow-torches to permit the transformer to proceed.

Mexico—The Mexican government and the Export-Import bank of Washington, D. C., have announced approval of a $3,500,000 credit to Nacional Financeria, S. A.,—a financial agency of the Mexican government—to finance purchases of materials, equipment and services for a new hydroelectric station to serve the city of Guadalajara.

The new station will have a 54,400 kw. installation.

Miscellany . . . .

Tangier, North Africa — A competition for a town plan for Tangier, open to all qualified town planners, architects and engineers, has been announced by the International Administration of the Zone of Tangier. Prizes totalling two million Moroccan francs will be awarded to the four best surveys and town planning schemes, based on the outline plan held at the office of the administration. The competition closes in April, 1948.

Venezuela—Edgar Pardo Stolk, minister of public works, said last week the government had signed a contract in Stockholm, Sweden, with the construction firm of Sentab, for construction of 125 hospitals, medical clinics and first-aid stations throughout the country.

Australia — The Australian government has passed legislation authorizing mass production of housing to meet the country's needs. The Directorate of Works and Housing at Sydney has asked bids on construction of some 40,000 homes, on sites already held by the government.

England — The Building Research Station of the British Department of Scientific and Industrial Research is now carrying out a series of projects to determine how houses can be kept properly warm with the smallest consumption of fuel. The experiment is in two parts. In the first part, eight houses have been built, identical in design but with different degrees of thermal insulation. Heating systems inside are all the same, so the scientists can discover under actual conditions how much heat is conserved by better insulation. The second part of the experiment, 20 houses similar in design and with identical thermal insulation, have been built, but their heating systems and appliances are different, to determine what type of stove, grate and heating systems are best and most economical in fuel.

Wide World photo

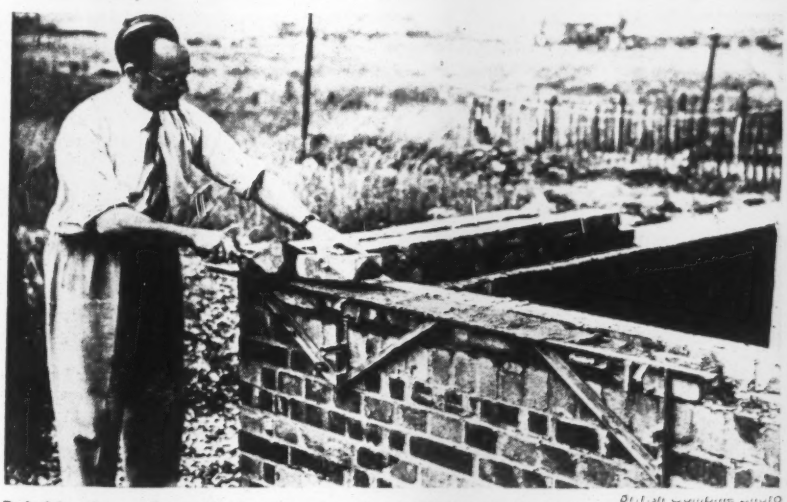
HIGHEST EUROPEAN DAM—In the narrow gorge of Non River in northern Italy, Italian engineers are building what will be the highest dam in Europe—a 460-ft.-high reinforced concrete structure. Started in 1939, the dam will cost an estimated $14,286,000, and back up a lake five miles long. Power installations will be made at the bottom of the gorge, below the dam.

Argentina—The construction of four hydroelectric plants and several thermoelectric powerhouses, enlargement of others and the construction of distribution channels and irrigation canals at a total cost of $53,500,000 has been decided upon, according to an announcement by the Argentine Secretary of Commerce and Industry.

Germany — All commercial navigation on the Rhine ceased Oct. 15, when the river reached its lowest level in history.

The gage at Kaub, below Coblenz, was lower than any previous recording—showing 1.77 ft., as against a normal 5.82 ft. at this season. Lake Constance was also reported to be more than three feet below the previous record low.

Commander Frank Leahy, USCG, who is director of Rhine River Field Control, said there is no indication as to when the stream will again become navigable, although normal seasonal rains expected in November would relieve the situation.



British Combine photo

Bricklaying Speeded—*How to lay 100 bricks in half an hour was demonstrated by L. S. Beamish, English inventor, who utilized a metal guide rail he devised. Clipped on the top course of bricks the apparatus maintains exact vertical and horizontal positions.*

Congress opens two housing probes

Two congressional investigations of the housing shortage are underway this week. A House labor subcommittee is looking at the picture from the standpoint of restrictive labor practices and applicability of the new Taft-Hartley labor law, and a joint Senate-House committee began field hearings aimed at breaking existing bottlenecks in materials and manpower, and measuring the need for public housing.

The joint committee, headed by Rep. Ralph A. Gamble, of New York, and Sen. Joseph W. McCarthy, of Wisconsin, scheduled hearings this week in Pittsburgh, Cleveland, Detroit, Indianapolis, St. Louis and Cincinnati. They intend to visit 28 other cities from Boston to San Diego by mid-December.

Before starting the field hearings the joint committee held conferences with representatives of government agencies involved in the housing picture and with industry groups.

Most of those talks were aimed at getting more production and better distribution of short items such as gypsum lath, nails and soil pipe. Most notable achievement was an agreement between War Assets Administration and Republic Steel to get back into production an Alabama blast furnace making merchant pig for cast iron soil pipe.

The House subcommittee, headed by Rep. Ralph W. Gwinn, of New York, began its hearings last week with testimony by representatives of government agencies and advocates of pre-fabrication. Among them was Home Finance Administrator Raymond M. Foley who predicted that unless costs come down substantially the housing market will be exhausted long before housing requirements are met.

John L. Haynes, chief of the construction division of the U. S. Department of Commerce, submitted to the committee a list of 60-odd alleged restrictive practices in the construction industry which raise housing costs. They covered limits on daily or weekly output by construction workers, union restrictions on use of mechanical equipment, bans on pre-assembled parts and fixtures and various other alleged "featherbedding" practices.

Although the hearing started out as an inquiry into restrictive labor practices, it quickly branched into other fields.

Dr. Corwin D. Edwards, Northwestern University economics professor formerly with the Department of Justice, spent hours criticizing established distribution channels for construction materials, municipal building codes, jurisdictional disputes and labor's past immunity from the anti-trust laws.

This week the Gwinn committee proposed to digest the opening hearings as background for field investigations.

Near-record for housing seen certain

Topping all previous records for the same month, private builders throughout the United States started more than 88,000 new permanent homes during September, the Bureau of Labor Statistics reported last week.

The figure brings to 615,000 the total starts of new permanent housing units in the first nine months of 1947, and practically guarantees the near-record housing year foreseen in this journal more than a month ago (*ENR* Sept. 18, vol. p. 374).

Indications are that starts for October are running a little behind September, but observers expect them to top 80,000—which would make the fifth straight month of a contra-seasonal rise in housing starts. At this rate, informed building men said, at least 70,000 starts for November and 60,000 for December may be expected.

If these figures prove correct, the total new housing for the year will top 825,000 units—a 20-year record.

Evidencing accelerated working schedules made possible by increased material supplies, completions of housing units are keeping pace, the BLS reported. For September, 77,000 completions were reported, bringing the nine-month total to 576,000—more than double the figure for the same period in 1946.

Most of this construction, BLS said, is in single-family dwellings.

Subsidized housing suggested for Canada

Government subsidized low-cost housing on a national scale was urged in Vancouver, B. C., last week by Albert Deschamps, president of the Canadian Construction Association at a national committee meeting, as a primary solution for the dominion's housing shortage. He also suggested an immediate large-scale immigration of skilled building tradesmen from displaced persons camps in Europe to meet a growing shortage of construction labor.

State housing expediter appointed in Indiana

Gov. Ralph F. Gates of Indiana has named Kenneth L. Schellie, director of the Indiana Economic Council, as state housing expediter, to follow recommendations of the council's advisory committee on housing and speed up the home-building program in the state.

Mr. Schellie's tasks will include: Conferring with representatives of the building industry with a view to eliminating inefficient and costly practices; discussing with leaders of organized labor the liberalization of the apprentice system; contacting members of Congress in an effort to encourage rental housing by permitting 50 per cent of the cost of multi-family rental dwelling units to be depreciated during a 5-year period following construction; and taking up with material producers the problem of obtaining a fair proportion of their products for home building purposes.

New equipment shown at N. E. road exposition

More than 100 exhibitors displayed about $3,500,000 worth of road equipment at the New England Highway Exposition in Boston, Mass., Oct. 14-16.

A feature of the exposition was a traffic circle, complete with stone curbing, flagstone parkways, flowers and shrubbery and a 10-ton granite flagpole base in the center of the plot. This outdoor exhibition lot displayed the heavier construction machinery. Working demonstrations were given.

Nearly all national manufacturers of highway equipment were represented. The hall, besides housing machinery and other equipment, displayed the latest models of diesel engines, parking meters, highway and traffic safety lighting devices, and highway and construction materials.

Court upholds dismissal of S. C. roads chief

On Oct. 9 the Circuit Court of South Carolina upheld the dismissal by the State Highway Commission of Commissioner J. Stanley Williamson, who was removed last July 17 although he had about two years of a 4-year appointment yet to serve (*ENR* Aug. 7, vol. p. 170). The court ruled that the commission acted within its authority when it replaced Williamson with C. R. McMillan, for many years state highway engineer.

Plan use of vertical sand drains under New Jersey superhighway

Fill for state's "dual-dual" road across marshes to be built on soil consolidated by recently developed method

One of the first applications in the East of vertical drains to highway construction is to be made in building a wide fill for Route 100 in New Jersey. This is a "dual-dual" highway being built across low-lying land between the heavily-travelled Route 25 (U.S.1) and Arthur Kill to relieve traffic on Route 25 south of the city of Elizabeth, N. J. (*ENR* Jan. 23, vol. p. 120).

Wide fill required

The new highway is to have a central divided 4-lane section for high-speed traffic which in turn will be separated from 2-lane highways on each side for local traffic. With the shoulders that are to be provided along all traffic lanes, the total width of the fill will be about 200 ft.

Much of the land over which this highway is to be built is marshy in character, muck or other soft material of depths ranging up to 24 ft. overlying firm material. On a contract for work let early this year, this soft material is being removed by hydraulic dredges, as shown in the cover picture of the Sept. 11 issue of *ENR*.

Bidders given a choice

On the 1.2-mile section in Linden, N. J., let Sept. 10, the bidders were given the alternative of using the vertical-sand-drain method of consolidating the soft material, which was developed by the California highway department and is now being applied to consolidation of the fill under La Guardia Airport at New York, or of removing the undesirable material and replacing it with approved material. The latter calls for 927,000 cu.yd. of wet excavation, 1,268,000 cu.yd of borrow excavation, and 56,000 cu.yd. of channel excavation. The sand-drain method calls for 821,000 cu.yd. of borrow excavation, 340,000 cu.yd. of sand blanket, 304,000 lin.ft. vertical sand drains, and 95,000 cu.yd. of channel excavation.

At the Sept. 10 letting, only one bid, $1,920,977, was received on the wet-excavation method and three bids ranging from $2,212,127 to $1,253,833 were received for the sand-drain method. The low bidder was the Construction Aggregates Corp. of New York. Its bid represents a saving of $667,144 over the excavation and fill method, and Charles M. Noble, state highway engineer, says that with the additional 160,000 cu.yd. of overload material which was included in the contract for the sand-drain method and which can be utilized at a later date on an adjoining contract, the net saving to the state will be about $750,000.

Many drains required

The arrangement of the sand drain is shown in the accompanying drawing. The contract calls for the placing of 18,000 drains with a minimum diameter of 18 in. The drains will be spaced 10 ft. apart and will vary in depth from 8 to 24 ft. The contract does not specify the method to be used in installing the drain, but it is expected that one of the methods described in *ENR*, March 6, vol. p. 386 will be used.

As evidence of the slow rate of natural consolidation of the material on which this fill is to be built if the vertical drains are not provided, Mr. Noble cites the fact that an adjoining fill for the Central Railroad of New Jersey, built on top of the muck about 80 years ago, is still settling.

O. J. Porter, consulting engineer, Sacramento, Calif., acted as consultant during the preparation of plans for the sand-drain design.

Road engineers approve present equipment

Present road building equipment is for the most part satisfactory in design and performance, according to discussions at the Midwestern Conference on Development of Highway Construction Equipment held in Kansas City, Mo., Oct. 9-10.

The Highway Research Board and the American Road Builders Association jointly participated in the meeting, attended by highway engineers and manufacturers representatives, and by some contractors.

Most suggestions for equipment improvement pertained to more precise control and proportioning of materials in concrete and bituminous mixes. A desire was expressed for better and more accurate soil sampling devices for obtaining undisturbed samples at depths up to 100 ft.

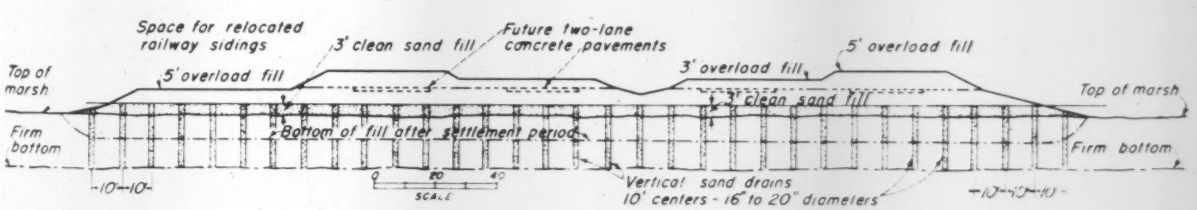
Highway engineers showed considerable interest in equipment for soil stabilization work. If some of the suggestions are carried out, contractors will be using equipment equivalent to that employed on bituminous and concrete paving for mixing and placing stabilized soil.

Harold F. Clemmer was general chairman of the meeting. Concrete, bituminous and soils sessions were headed, respectively, by Charles W. Allen of Ohio, F. V. Reagel of Missouri, and E. A. Willis of Washington, D. C.

Pennsylvania is ahead in 1947 road building

At the present time, Pennsylvania is leading all other states in the volume of road improvement contracts awarded this year.

Figures for the first six months of 1947, show that Pennsylvania's Highways department awarded 216 contracts totaling $43,981,000, compared with a total award of $34,776,000 by Texas, in second place, and $32,489,000 for California, third.



***Vertical Sand Drains** are to be used to consolidate the soft material under a wide fill for New Jersey's new "dual-dual" highway. The "overload fill" shown in the drawing will be moved forward to another project after the underlying material has been consolidated.*

HIGHLIGHTS OF MUNICIPAL DEVELOPMENTS

Summarizing current activities in city engineering and construction throughout the country.

Sewer projects lead municipal activities—Cleveland approves location of $30 million freeway—Invite fire group to inspect East St. Louis—Seek remedies for water shortages

Problems of sewage and refuse disposal—and the corollary of stream clearance—took the spotlight in the municipal field last week, as cities authorized new expenditures and announced plans for new projects.

Biggest single job to reach the active stage during the week was at Salt Lake City, Utah, where county commissioners advertised for bids on a $3,250,000 suburban sanitary sewer system. Bids will be called Nov. 14. The new system will involve construction of about 92 miles of main sewer lines ranging from 8-in. to 36-in. in diameter; and about 28 miles of 4-in. diameter house service lines. Caldwell, Richards and Sorenson, Salt Lake City consulting engineers, assisted in preparation of plans for the work.

The Toledo, Ohio, city council, meanwhile, heard reports that plans for the city's proposed $4,500,000 secondary sewage treatment plant should be completed by spring. Bradenton, Fla., entered agreements with bonding companies to finance a $450,000 sewer extension and improvement program; Muncie, Ind., began work of installing pumps in its storm sewer system to prevent flooding by flash floods; the Buffalo, N. Y., sewer authority voted to issue $1,500,000 in bonds to finance construction of a project for storm water relief, and New Orleans, La., asked Army help in removing backwaters of recent floods which have been contaminated by sewage.

Boise, Idaho, city councilmen heard a report from the firm of Alvord, Burdick and Howson that a modern disposal system for the city would cost about $1,196,000, and Seattle, Wash., proposed to engage Dr. Abel Wolman, Johns Hopkins University sanitation authority, to aid in solution of the city's sewage disposal problem. State authorities recently warned Seattle that it is polluting the waters of Puget Sound.

Cape May, N. J., and neighboring West Cape May, reached a rental agreement whereby West Cape May can use its neighbor's disposal system.

Ask fire inspection

The Illinois State Fire Inspection Association has been invited to make a detailed inspection of East St. Louis, during the week of Jan. 12, 1948, according to the chamber of commerce.

If the invitation is accepted, the association will make a cross-section inspection of the residential and business districts, and of schools and public buildings, and submit a comprehensive report and recommendations to city officials. The last such survey was made in 1927.

Results of the survey may be used to aid a fire department campaign for new city fire codes "with teeth", Fire Chief Russell Wright indicated in a recent talk. While praising the work of his department's inspectors, Chief Wright cited lack of cooperation from the public and lack of adequate penalties to force compliance.

Water shortage remedy

Temporarily relieved (by unprecedented rainfall) of a water shortage that seriously threatened city residents and industrial establishments (*ENR* Sept. 25, vol. p. 428) Winston-Salem, N. C. last week turned its attention to remedies. It engaged John D. Watson as a consulting engineer to determine whether the top of the dam at Salem Lake—the city's present supply reservoir—can be raised further. Officials said that such a procedure would be carried out only as a stop-gap measure, pending construction of a proposed new water line to tap the Yadkin River. R. A. Thomas, city commissioner of public works, recently advised the council that he would not recommend another addition to the Salem Lake structure, pointing out that 11 ft. have been added to the dam since it was built in 1919 and that he feared the earthen embankment would not withstand greater water storage.

***Plastic Traffic Markers** — Developed to end maintenance problems, these plastic traffic markers have recently been installed on a number of downtown streets in Akron and other Ohio cities. An asphalt primer is brushed on the street surface, and the marker blocks—coated on one side with hot asphalt from a truck kettle—are pressed into place by means of a rubber-soled tamper. Blocks may be used to mark traffic and pedestrian lanes, and for control messages. The Armor-Flex Co., St. Louis, Mo., is the manufacturer.*

The Chester Municipal Authority, of Chester, Pa., announced it had rejected all bids for the construction of a dam for its new water supply system because all tenders were too high. The authority planned a $9,000,000 project, including the dam, a pumping station, mains and other works.

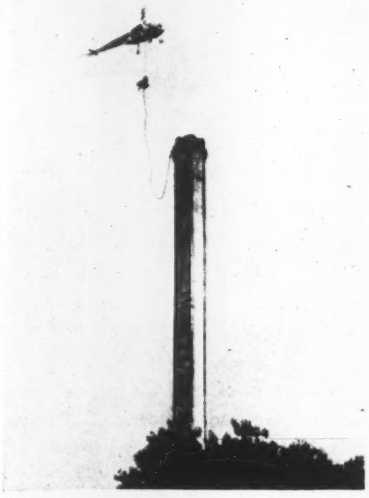
On Oct. 16, work was started on the $9,137,000 water tunnel for Baltimore, Md., that will extend from Liberty Road to Lake Montebello, and eventually will reach the upper Patapsco River. The contract, held by Samuel R. Rosoff, Ltd., is to be completed in 900 days.

At Seattle, Wash., W. C. Morse, water superintendent, was preparing financing plans for a $2,100,000 water department expansion program to enable that utility to keep pace with the city's growth. The program will include replacement of large sections of existing pipe, installation of new mains, and other work.

Approve freeway route

The city planning commission of Cleveland, Ohio, approved legislation establishing the route of a proposed $30,500,000 section of the "Inner Belt Freeway" for the city, and adopted a general plan for the central section of the metropolitan area outline what the commission believes to be the direction that the future physical expansion of the area should take. This plan includes provisions for the rapid transit and freeway developments, and for expansion of recreation facilities.

Adoption of the plan has the legal effect of requiring public agencies to submit any plans they make for physical changes in the affected area.



***Sky Hook**—The Cummings Co., New Westminster, B. C., contractors, actually used a "sky-hook" in preparation for cleaning and repainting this 159-ft. chimney at the provincial mental hospital at Essondale, B. C. Since no ladders or cable was installed when the chimney was built, the contractor hired a helicopter, which succeeded in dropping a scaffolding hook over the top edge of the chimney, to permit use of a bo'sun chair for the cleaning work.*

The freeway proposal, now scheduled to go before the city council, will be implemented in three sections—the first to extend from W. 14th and Abbey streets to East 22nd street and Cedar Avenue, S.E., and will include a new central viaduct and approaches.

Other cities also advanced their plans for street and traffic-handling improvements. These included:

An announcement by the Connecticut State Highway Commission that it will give first priority consideration to a $12,000,000 program for redesigning Morgan Street and Connecticut Boulevard, and other traffic bottlenecks in Hartford; orders to the Columbus, Ohio, engineering department to begin plans for more than $3,500,000 worth of work on street improvements and repairs; appointment of committees by the city councils of Rock Island and Moline, Ill., to seek an alternate route for a proposed throughway to be built in the two communities; start of demolition of some 14 buildings in Boston, Mass., to make room for municipal parking lots.

In legal attacks on the traffic problem, Indianapolis, Ind., raised the speed limit from 20 to 30 miles per hour, and Wilmington, Del., decided to convert seven downtown streets into one-way "expressways" for 90 minutes each afternoon. Police will halt all parking on these streets during these periods.

Propose $250 million N.Y. port work

The World Trade Corporation, created by the New York State legislature in 1946, last week made public a $250,000,000 long-range program for the complete rehabilitation of New York City's waterfront facilities.

Under the plan, the corporation would lease city-owned piers and other waterfront facilities for not less than 40 years. Financing the work by sale of its own revenue bonds and prior equity stock, the corporation at first would spend $89,000,000 to build new piers and replace or rehabilitate old ones.

Five main steps were listed in the over-all program (1) Leasing of city-owned properties; (2) Construction of a $60,000,000 Washington Street market; (3) Acquisition of privately-owned waterfront facilities; (4.) Development of a center for industrial exhibits to stimulate export and import trade; and (5) Establishment of a "world trade house" for the benefit of foreign business visitors.

Observers said that the Port of New York Authority which has already proposed taking over piers at Newark and Hoboken, N. J. is willing to submit its own plan for waterfront rehabilitation, and on Oct. 20 it was reported that Mayor O'Dwyer had asked the bi-state organization to do so. The authority has notified Governor Thomas E. Dewey that it believes the proposed arrangement between the city and the World Trade Corporation would violate the New York-New Jersey treaty under which the Port Authority was established.

Toledo port group seeks dock facilities

The Toledo, Ohio, Port Commission said last week it was studying the possibility of acquiring 7,000 ft. of improved dockage on the riverfront in downtown Toledo, to be vacated soon by the New York Central and Baltimore & Ohio railroads.

The concrete dockage will be vacated when the railroads move their coal and oil loading facilities to a new $18,000,000 down-river terminal, now under construction.

According to the commission the abandoned dockage would be converted into a terminal area, and land would be rented to private operators for construction of warehouses and other industrial structures. Thomas Reeves, city commissioner of harbors and bridges, estimated it would cost $400 per lineal foot to duplicate the 3-ft. thick concrete dockage alone.

The commission, as now established, has no authority to act on proposed improvements, but may only recommend them to the city council.

Push preparations for Houston channel tunnel

Engineers for Harris County (Houston), Texas, last week completed setting up a branch office in the Civil Courts Building in preparation for the calling of bids November 26 on the $5,000,000 vehicular tunnel under the ship channel at Pasadena.

Meanwhile, printed specifications for the tunnel, approach roads and ventilating and electrical equipment were finally approved by the county commissioners court. Lump-sum bids will be received on all but the approach roads.

18th Kentucky bridge freed of toll charges

The million dollar Milton-Madison Bridge over the Ohio River between Kentucky and Indiana will be declared free to traffic on Nov. 1.

The bridge will be the 18th of 19 toll bridges built or acquired by sale under a 1928 Kentucky state law to be declared free. The 3,181-ft. bridge was opened December, 1929, connecting three principal highways in Indiana with four Kentucky routes. The state bought the structure in 1937.

Consider revision of Minnesota's housing code

Minnesota's 30-year old housing code will be studied with a view to modernization during the 1949 legislative session, according to Robert Cerny, University of Minnesota associate professor of architecture and chairman of the emergency housing committee appointed by Mayor Hubert Humphreys, of Minneapolis.

Cerny's committee, in conjunction with a committee from the Minnesota chapter of the American Institute of Architects, will study the Minneapolis building code.

As an example of the state code's outmoded provisions, Cerny pointed out that it requires garage ceilings to be constructed of metal laths and plaster if there are living quarters above them, and that garage doors must be covered with metal.

The committee also is considering the advisability of co-operating with a similar committee in St. Paul to see if the twin cities can agree on a new code that could be adopted by both of them.

Plastics factory poses some building problems

Unique problems involving control of atmospheric conditions and safety features have been solved recently in the construction of a new laminated plastics plant, built for the General Electric Co. at Coshocton, Ohio.

The structure consists of a 2-story brick and limestone office section, and a 1-story factory section, 435 ft. x 523 ft., equipped throughout with ventilating controls and completely air-conditioned in a number of strategic departments.

Hundreds of supply and exhaust fans, the largest of which are 100 in. in diameter, provide for the controlled ventilation of those departments that are not fully air-conditioned. Many of these units are located directly above the impregnating room, where all types of paper and cloth are treated in travel through a number of long coating machines. The exhaust fans draw air out of the area through ducts along the wall and around the machines, providing for speedy removal of heavier-than-air vapors that are released in the coating process.

Air is cleansed by passing through electromatic filters.

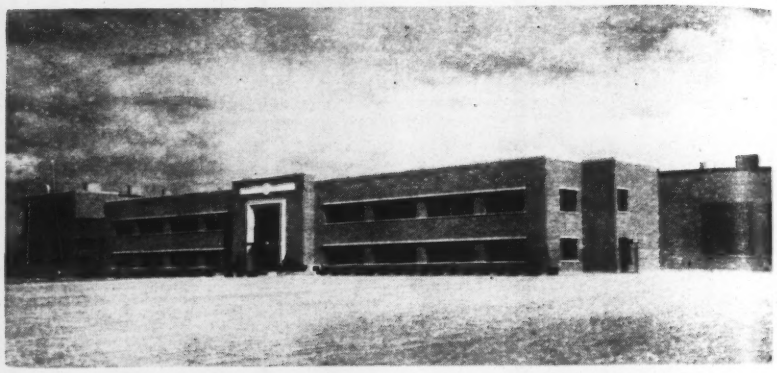
Design aims at low maintenance

Glazed tile is used throughout the interior of specially insulated walls to facilitate maintenance. The roof deck is steel, above which is 1 in. of insulation and 15-year bonded tar and gravel roofing.

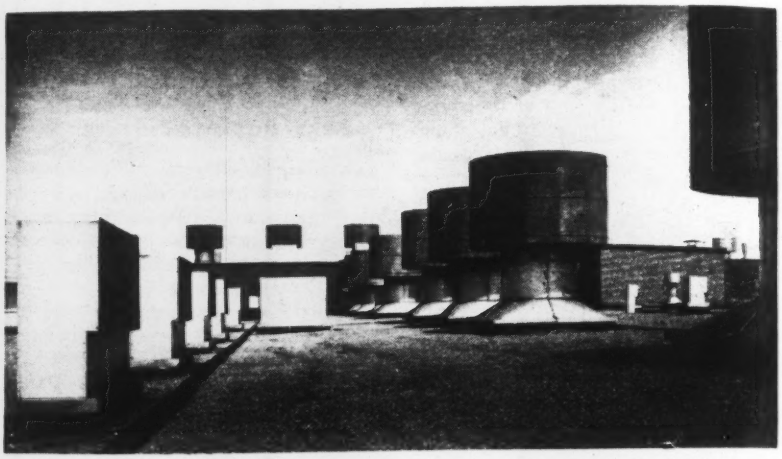
Other features of the plant include scores of hydraulic presses, ranging up to 5,000 tons capacity, used in forming decorative laminated plastics. Some of these presses are set on special reinforced concrete foundations, extending 17 ft. below floor level. An elaborately-equipped laboratory, completely soundproofed, is also part of the Coshocton installation.

Lighting in most parts of the plant is done by continuous rows of fluorescent troffer lighting units, mounted at a height of 34 ft. to give a shadowless light. Two lamp fixtures, mounted on 8 ft. 6 in. centers, maintain better than 45 candles of illumination. In some other rooms, explosion-proof fixtures have been utilized, particularly in sections where varnishes used in the manufacturing process are formed in dozens of deep kettles, which extend through the floor grille to the basement area below.

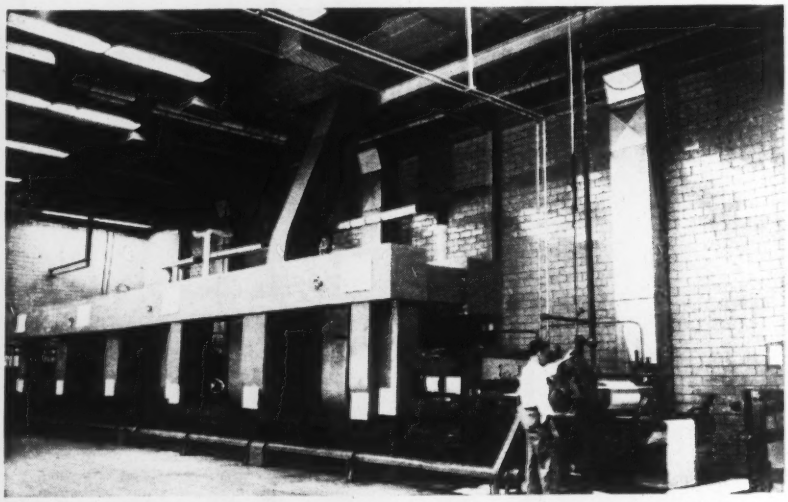
Construction was done for the General Electric Co. by The Austin Co., of Cleveland, Ohio.



Simple functional lines *characterize the 2-story brick and limestone office section dominating highway approaches to the General Electric Co.'s new laminated plastics plant at Coshocton, Ohio.*



Some of these exhaust fans *are 100 in. in diameter and 17 ft. high to provide controlled ventilation for those manufacturing departments that are not fully air-conditioned, providing speedy removal of obnoxious vapors.*



Paper and other flat roll products *are coated with varnish and dried in a treating machine, almost completely obscured from view by a maze of ventilating ducts. Inlets for ducts to exhaust fans on the roof are located along the wall and around the machines.*

Strike of Ebasco technical employees drags on into seventh week

Representatives of the FAECT and company met on Oct. 17 for first time since strike started but without concrete results

A first step toward settlement of the strike that for six weeks has slowed down operations in the New York offices of Ebasco Services, Inc., engineering subsidiary of the Electric Bond & Share Co., was taken last week when representatives of the company and union sat down together on Friday for the first time since the strike was called on Sept. 5. Who called the meeting is uncertain, each side claiming that it was the other, but both are in agreement that no progress was made toward settlement.

The bargaining group

The union involved is the Metropolitan Federation of Engineers, Architects, Chemists and Technicians, which now is Local 231 of the United Office and Professional Workers of America, CIO. A little over a year ago it was certified as the bargaining unit for senior designers, checkers, draftsmen and junior draftsmen in the Ebasco offices. Section chiefs, squad leaders and all engineers in the higher brackets are not represented by the union. However, the union claims that one third of its members are licensed professional engineers.

The union states that 325 of the 375 men in the Ebasco office for which it is the bargaining agent are on strike and that work totaling $250,000,000 in this country and abroad is tied up. The company counters with the statement that 125 men still are working. It denies that any large amount of its work is seriously affected.

Contract made last year

Following certification as the bargaining agent, the union negotiated a contract with the company that went into effect on Sept. 1, 1946, and was to run for one year. It called for wage increases of 15 percent and contained a wage-reopening provision. Acting under that clause, the union, on Feb. 15, asked for another increase of 18 percent and for certain changes in working conditions the company held were not covered by that clause of the contract.

Negotiations over these issues dragged on until April when the union asked for arbitration under the contract. The arbitrator took until June 6 to reach a decision, at which time he approved an across-the-board increase of $5 a week, retroactive to Feb. 15, based on a 5.8 percent increase in the cost-of-living index between Sept. 1 and Feb. 15. In his report the arbitrator said: "We conclude that the union has not established in this proceeding that the company's rates should be revised upward because they are significantly below the prevailing standards for comparable work". On the other issues he said: "As to collateral conditions of employment—paid holidays, vacations, sick leave and the like—the company's present provisions are, generally speaking, consistent with the more generous of prevailing practice in the industry".

New negotiations begun

Within a month after this award had been made, the date set in the contract for the start of negotiations of a new contract arrived and the union advised the company that it desired numerous changes in the new contract, including another salary increase amounting to 12 percent, correction of salary inequities, a more effective voice in promotions and merit increases, and better severance pay.

On the matter of pay increase, the company held that the cost-of-living index had gone up less than 2 percent between Feb. 15 and July 1, the date negotiations started and that no further increase was called for on that ground. Representatives of the company state further that a comparison of its rates with those of other large engineering firms shows it is one of the top three.

Discussion of the unions proposals went on intermittently all summer without result, and as a consequence, a few days after the old contract expired on Sept. 1, the union went on strike and began picketing the company's offices at 2 Rector St.

Representatives of the union state that before the strike began the company made arrangements to farm out part of its work to "runaway job shops" both in New York and out of the city in anticipation of a strike.

On this point, the Ebasco officials said they have let part of their work out to contract for years, and as evidence that this was recognized by the union, cited a clause in the contract authorizing the continuation of that practice so long as it did not result in a reduction of the staff in the main office.

Settlement moves

After the strike got under way, federal mediators began a study of the questions at issue in preparation to offering their services. In the meantime, the company engaged as counsel Walter Gordon Merritt, a lawyer who has specialized for many years in strike settlement. Officials of the union state that Mr. Merritt is the one who brought the representatives of the union and the company together on Friday after having advised the federal mediators that he would prefer to explore the possibilities of making a direct settlement before they took a hand in the matter. Company officials state that the union asked for the meeting.

CAA photo

***Hangars for Washington**—Five new hangars are now under construction at the National Airport in Washington, D. C. in what is believed to be the largest program under way at any U. S. field. Four 280x180-ft. structures, and one 285x215-ft. hanagar are being built. Steel trusses supported on reinforced concrete bents are being used. Dyker Building Co. of New York City, is the general contractor on the $4,414,700 project. The Public Buildings Administration is supervising construction for the federal government.*

MEN AND JOBS

Malcolm Jones has transferred from the Washington, D. C., office of the Bureau of Reclamation to the industrial branch of the economic division of the Office of Military Government in Germany. Jones, who received a B.S. degree in civil engineering from Washington University in St. Louis in 1933, joined the Bureau of Reclamation in September, 1946, as chief of the coordinating section of the branch of project planning.

A. W. Connor, Toronto, Ont., civil engineer, is retiring after 50 years in the profession. He was graduated from the University of Toronto in arts in 1893 and in engineering in 1895.

Stanley H. Markey has been appointed Warren County sanitary engineer at Lebanon, Ohio, effective next January.

J. L. Gubbels, for 15 years head of the Texas State Highway Department's landscape and urban planning division, has resigned to go into private business in Austin.

Promotion of **Fred W. Fisch** of Schenectady, to be director of the Department's Bureau of Urban Arterial Route Planning has been announced by Charles H. Sells, New York State Superintendent of Public Works. Mr. Fisch has served as principal planning engineer in that bureau since joining the department on April 1, 1946. His previous employment record includes: malaria control work for the U. S. Public Health Service at Southern Field, Americus, Ga.; the engineering department of Flint, Mich., and later sanitary engineer for Lansing. In 1925 he was named sanitary engineer for Schenectady. From 1934 to 1938 he was consultant to the Schenectady Municipal Housing Authority.

Irving A. Denison has been appointed chief of a section of the National Bureau of Standards to direct studies of underground corrosion, involving the burying and periodic excavation of many thousands of specimens of pipe materials and protective coatings in representative soils. The section is attempting to develop materials that are resistant to corrosion. From 1922 to 1929, he was engaged in the analysis and classification of soils for the Bureau of Chemistry and Soils, U. S. Department of Agriculture. He entered the soil corrosion section of the National Bureau of Standards in 1929 and, with the exception of four years spent on special war assignment, he has been working on problems of corrosion.

Sumner P. Wing has been appointed special representative to cooperate with the State Department and serve as liaison officer with irrigation representatives of foreign nations. Mr. Wing succeeds **William E. Corfitzen,** named irrigation adviser to the American Mission for Aid to Greece. Mr. Wing will participate for the Bureau of Reclamation in the program of the United States Interdepartmental Committee on Scientific and Cultural Cooperation.

A graduate of Stanford University, Mr. Wing was an engineering officer in the first world war, and has been with the Bureau of Reclamation since 1930.

B. G. Balfour has replaced **W. E. Neill** as resident engineer for the Texas State Highway Department in the Athens district. Neill resigned to become county engineer for Henderson County. Balfour was graduated from Texas A. & M. College and served in the Army.

Arthur E. W. Dodds, a registered civil and structural engineer, has opened offices in Seattle, Wash., at 1225 Smith Tower for the practice of engineering and architecture.

Ralph B. Thomas formerly assistant highway engineer of Story County, Iowa, has been appointed highway engineer for Adair County.

R. J. Halpin, a veteran and a civil engineering graduate of Iowa State College, is city engineer of Muscatine, Iowa.

Joseph T. Connolly, an Iowa state highway employee for 19 years, has been appointed maintenance engineer of Dubuque County.

The Robinson Clay Products Co., Akron, Ohio, has announced the appointment of **William R. Slattery** as chief engineer to be in charge of engineering for Robinson plants in Ohio and Pennsylvania. A graduate of Lawrence Institute of Technology, he had been employed for 10 years as engineer on plant layout and design for the Plymouth Division of the Chrysler

World's largest crane blueprints interest E. E. McKeen, manager of erection for the American Bridge Co. on the work, and Comdr. L. J. Stephenson, CEC USNR, project manager for the Navy. Nearing completion at the San Francisco Naval Shipyard, the crane has twin 730-ft. runways and is capable of a 450-ton lift.

New officers of the Western Association of State Highway Officials include, left to right: W. C. LeFebvre, Arizona state highway engineer, vice president; Tom W. Holman, chairman, Washington State Advisory Commission, president, and E. V. Miller, Arizona planning engineer, secretary-treasurer.

Building waterbound macadam pavement on U. S. Highway 250 between Wilmot and Mount Eaton, Ohio, are, left to right: A. V. Krites, engineering aid; Elmer O. Vogt, contractor; Robert M. Urban, superintendent of construction; R. C. Ruddy, engineering aid, and L. L. Ringer, project engineer.

Corporation at Detroit, Michigan.

Walter Baver has been named engineer-in-charge of the Newark, N. J., division of sewers, where he has been designing engineer for the last 15 years.

Sol Pincus, sanitary engineer of the New York City Department of Health, is now on retirement leave from that post.

M. D. Rawding, of Mosher & Rawding, Liverpool, N. S., general contractors, and a member of the Nova Scotia legislature the last two years, has been named provincial minister of public works and highways.

Roy W. Cox, state highway director at Topeka, Kan., has announced these promotions of highway engineers: **Paul G. Martin,** engineer of design, to planning engineer, succeeding **John Harbes, Jr.,** who has resigned. **Loxley H. Vincent,** there since 1937, becomes assistant engineer of design. **Robert M. Wellis,** there since 1942, becomes engineer of design. **Kenneth W. Comfort,** there since 1931, promoted to assistant construction. **R. G. Porter,** division engineer at Garden City, since 1942, goes to Topeka as assistant to engineer of design. **Clark Steyer,** division engineer at Chanute, succeeds Porter at Garden City. **W. E. Allison,** assistant to Steyer at Garden City, now the division engineer at that post. **G. A. Sutton,** division office engineer at Chanute, now assistant division engineer at that place.

John M. Bresnahan, administrative chief of the Port of Boston, Mass., Authority, has been named assistant director, and will serve as principal assistant to **J. Alex. Crothers,** port director. Mr. Bresnahan joined the authority in 1946 as associate civil engineer. He succeeds **Andrew F. Lane** who has been appointed vice-president and manager Clark Terminal Operators of Boston.

Harold M. Crowell, veteran Bureau of Reclamation employee, has been named engineer at the Bixby Dam on the Moreau River in north central South Dakota. **Floyd M. Jensen** will be engineer at the Cannonball Dam project south of Elgin, N. D.

Ralph Monson has been named assistant city engineer of Rochester, Minn.

H. A. Sullivan is county highway engineer for Traverse County, Minn., succeeding **A. C. Chard** now Wilkin County highway engineer with headquarters at Breckenridge.

La Vern J. Charles, district engineer of the P. R. A. for Minnesota, has retired after 42 years of government service.

E. M. Matthews has been named a resident engineer to head highway work in the Iowa counties of Montgomery, Mills, Fremont and Page.

The recently formed architectural and engineering firm of Naess and Murphy will carry on all current work of Shaw, Naess and Murphy, dissolved Sept. 20. **Sigurd E. Naess** and **Charles F. Murphy** will continue at the present location, Railway Exchange Building, Chicago, Ill.

Charles Salcome, a graduate of the University of Iowa, has been employed as office engineer by the Yakima, Wash., water department. He served five years in the Army Air Forces.

Samuel P. Coffin has been appointed chief engineer of the Massachusetts Department of Public Utilities, Boston, succeeding **William J. Keefe,** who recently became superintendent of rolling stock and shops, Eastern Massachusetts Street Railway, Boston. Mr. Coffin joined the engineering department of the Boston & Maine Railroad in 1901 as a rodman. He became an assistant engineer in 1907, later a divisional supervisor of bridges and buildings, division engineer (maintenance of way), and in World War I served in Europe as an officer in the U. S. Army Railway Transportation Corps and maintenance engineer, Inter-Allied Railway Commission.

John R. McLean will represent The Ferguson Co. as superintendent on the construction of a new chlorine and caustic soda plant to be built for the Dominion Alkali & Chemical Co. at Beauharnois, Que.

Lt. Col. George F. Dixon, Corps of Engineers, has received an award of $800 from the Freeman fund of the American Society of Civil Engineers for a study of European installations to maintain harbor channel depths by induced scouring at German ports.

Paul J. Eckert of Napoleon, Ohio, has been appointed city engineer for Bryan, Ohio, to succeed **C. D. Decker.** Eckert is a graduate of Ohio State University and was with the Ohio State Highway Department 12 years in various engineering capacities, latterly as acting engineer for Henry County, Ohio. Decker becomes city manager of Grafton, W. Va.

Harry A. Ackley, of Ackley, Bradley and Day, consulting engineers and architects of Sewickley, Pa., has specialized in design and problems of construction of new swimming pools, and the rehabilitation or reconstruction of older pools.

Surveying navigable waterways of the Port of Chicago on a recent 65-mile boat trip, Col. W. P. Trower (right) Chicago district engineer and host to the inspection party, exchanges opinions on city-owned bridges with Oscar E. Hewitt, Chicago commissioner of public works.

Carl S. Warner (left), superintendent of construction for Columbia Steel Co.'s $25,000,000 expansion program at its Pittsburg, Calif., plant, is shown studying plans with Fred W. Crocker, Chief Engineer of the J. H. Pomeroy and Co., Inc., general contractors on the project. Columbia Steel Co. is building a new cold reduction sheet and tin plate mill—the first of its kind in the West. Warner is a veteran Columbia Steel employee.

Southern Florida hit by heavy floods

Southern Florida is now recovering from what Army engineers describe as one of the most destructive floods that has ever occurred in that area.

The rich agricultural area south of Lake Okeechobee, the city of Fort Lauderdale, and the greater Miami area are especially hard hit, a survey revealed last week.

To reduce the damage, the Jacksonville office is carrying out a $3,000,000 emergency construction program; and is also rapidly completing a comprehensive flood control program for the area south of Lake Okeechobee that calls for $30,000,000 of construction. (A report on this plan is scheduled to be submitted to the chief of the Corps of Engineers in December.)

The severe flooding resulted from abnormal rains since May, plus the hurricane of Sept. 17 and a second heavy windstorm Oct. 11. Between May 17 and Oct. 15, average rainfall in the area around Lake Okeechobee has been 44.7 inches. Main damage around the lake has been to agriculture, but around Ft. Lauderdale and Miami, highways have been damaged and municipal services hard hit. State route 25, leading from Lake Okeechobee, and route 7 between Miami and Ft. Lauderdale are closed.

Emergency construction in progress under corps direction is concentrated principally on strengthening privately-owned levees and enlarging existing drainage waterways. One of these jobs—on State Route 716, leading southeastward from the lake—will see the highway made over a levee to prevent lake waters from flooding rich farmlands to the south.

The high levee extending along the southern edge of the lake, completed 10 years ago by the corps, has sustained no extensive damage, and all control gates are operating effectively, although the lake is three feet above the preferred maximum elevation.

Because of the flat country and vast areas now covered by water, early relief for much of the section is apparently impossible, even if no more rainfall is received.

PERSPECTIVE . . . .

"Big Steel" Builds

More than a billion dollars—a figure approximating one-twelfth of the total U. S. construction for 1947—will be spent by steel companies during the next year for expansion of production facilities.

The total figure was revealed for the first time recently by Admiral Ben Moreell, wartime chief of the Navy's Bureau of Yards and Docks and now president of Jones and Laughlin Steel Corp., who undertook to answer for the industry sharp criticism for failure to meet current demand.

Denying charges of short-sightedness and lack of faith, Adm. Moreell blamed four factors for present shortages. He cited pent-up demand caused by wartime restrictions; the need for repairing and rebuilding steelmaking facilities; difficulties in obtaining steel and iron scrap, and strikes in both steel and coal industries during 1946 and 1947.

"This last factor alone (strikes) . . . has caused the loss of an estimated 18 million ingot tons of production . . . enough for the automobile industry for 18 months at the rate at which it used steel in the first half of this year," he added.

"But the steel companies of the United States began their expansion and improvement programs shortly after V-J day, and in aggregate, more than one billion dollars will be spent . . . by the end of 1948."

It should be noted, for a picture of the vastness of the sum involved, that a billion dollars represents almost one-half the net value of all the plants, properties and equipment of the entire steel industry today.

Paradoxically, such immense expenditure won't have quite the return, productionwise, as might be expected. Adm. Moreell expects the program to result in a net production increase of about 2,500,000 tons. Much of the new steel must go into plants that will produce more steel.

Steel men apparently do not see the immediate need for what their spokesman called "a somewhat hysterical demand for increasing production by twenty million tons annually. Feeling themselves to be looking far ahead, but as practical men, they think any such increase is unwarranted at present, and it would require revamping the entire steel cycle starting at the mines, to become a reality.

Water right claimants delay Verde River plan

Refusal of water right claimants along 250 miles of the Verde and Gila rivers in Arizona to withdraw objections, has ended the chances of an early ruling on the application of the city of Phoenix for permission to install floodgates at Horseshoe Dam. O. C. Williams, state land and water commissioner, has set the start of public hearings for Nov. 4.

The Bureau of Reclamation, which holds final authority, has announced it will withhold approval of any plans relative to the dam until all parties are in agreement.

Horseshoe Dam, on the Verde, was built during the war by the Phelps Dodge Corp., for exchange of water for its Morenci mine. The earth- and rock-filled structure has a foundation designed to support storage of 300,000 acre-ft., but its present height limits capacity to 60,000 acre-ft.

Installation of floodgates will add 75,000 acre-ft., to the dam's storage capacity and assure additional city water. About a year ago Phoenix voted a $6,000,000 bond issue for further development of Verde facilities, earmarking $800,000 for construction of Horseshoe Dam floodgates.

Protests against the project are based on the ground that the bureau may abandon plans to increase its height to the full 300,000 acre-ft. capacity if the city goes ahead with floodgate construction.

C. & N. W. Railway plans continuous-rail program

The Chicago and North Western railway is installing continuous rails on its lines, continuing a program that first got under way in 1941. A welding plant set up recently at Council Bluffs, Iowa, ships long welded sections to all points in its system.

The plant recently turned out 1,060 sections 78 ft. long; 428 sections 117 ft. long and eight sections, 663 ft. long.

Sections of trackage that have caused trouble in the past get priority.

There still is some controversy among railroad men on the benefits of continuous rails. However, many are convinced that, entirely aside from the reduction of noise that results, the rails afford a substantial saving in track maintenance cost. The initial cost is higher, however. Reduction in track maintenance cost is estimated at around 30 per cent. But against this saving must be charged $1,500 to $2,000 more per mile of installation.

OBITUARY

James Rogers Ellis, 70, retired civil engineer of the United States Geological Survey, died Oct. 13 in Chevy Chase, Md. Mr. Ellis had completed nearly 50 years of service with the Government before his retirement early this year.

Leonard McTaggart, 77, a retired Wellsville, Ohio city waterworks engineer, died Oct. 9.

Edward H. Windolph, 59, chief engineer of the Alliance Structural Co., Alliance, Ohio., died Oct. 9.

Leaming M. Rice, 80, city engineer of North Wildwood, N. J., for the last 47 years, died recently.

Frank Ashley Foster, 54, died in Los Angeles, Calif., recently. He was the principal engineering construction inspector for the city and had been employed by the city bureau of inspection for 24 years.

William H. White, 62, a former civil engineer for the New York, New Haven & Hartford Railroad and the Pennsylvania Railroad, died recently in Rochester, N. Y. He retired four years ago after having served 30 years with the two railroads.

Reinhold Heller, 72, a retired engineering employe of the New York State Public Service Commission, died at Scarsdale, N. Y., Oct. 14.

Guy B. Bebout, 67, civilian engineer with the South Pacific division, Corps of Engineers, died recently in Los Angeles. He spent his last few years on Southern California flood control problems and under him several dams were designed and built. A civil engineer graduate of Ohio State in 1905, Mr. Bebout began with the Corps in the West Virginia district. In 1921 he went into private practice and in 1930 returned to the Corps in the Vicksburg district. He was transferred to Los Angeles in 1935.

Harry C. Clark, 80, builder and contractor, died in Delaware City, Del., Oct. 16. His firm built most of the permanent buildings at Fort DuPont, Del., and Fort Mott, N. J.

John L. White, 45, vice-president of the White Construction Co., Houston, Tex., died Oct. 9.

Walter S. Olson, 57, director of the division of border resources and engineering, Minnesota Department of Conservation, died Oct. 15 in St. Paul after service in the first world war, he joined the Minnesota department of drainage and water.

Clarence B. Eaton, 66, of the San Francisco construction firm of Eaton and Smith, died Oct. 16. His firm built a $5,000,000 addition to the Benicia Arsenal during the war, the San Francisco approach to the Golden Gate Bridge, and the rail approach to the Bay Bridge. Mr. Eaton was a civil engineering graduate of Stanford University, 1905. He had worked for California utility companies and the city of San Francisco. He helped form the Contractors Association of Northern California, now an AGC chapter.

James E. Gibson dies; waterworks leader

James Edwin Gibson, 72, manager and engineer of the water department of Charleston, S. C., past president and honorary member of the American Water Works Association, died Oct. 15.

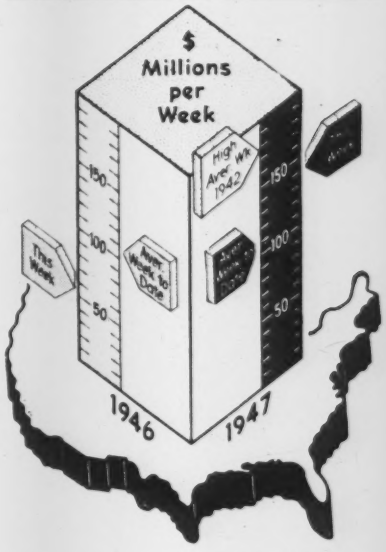
Mr. Gibson was born in Arkansas and was graduated from the University of Arkansas in 1894. Early in his career he was principal assistant engineer of the American Pipe and Construction Co. of Philadelphia, Pa., specializing in design and construction of hydraulic and water supply facilities, including water supply for the Pennsylvania Railroad between Philadelphia and Pittsburgh. In September, 1917, he was chosen manager of the Charleston city water department and had been connected with the department continuously since that time. He designed and supervised construction of the Edisto River tunnel beneath the Ashley River to give Charleston a new water supply.

Mr. Gibson had been active in the AWWA since 1922. In addition to serving as president he also served the association as a trustee, director and vice-president. He was the recipient of the association's Diven Medal in 1929 and of its Fuller Award in 1941.

Charter Oak Bridge passes 5-year mark

The Charter Oak Bridge, connecting Hartford and East Hartford, Conn. across the Connecticut River, passed its fifth birthday, Sept. 5. To that date, the bridge accommodated 18,000,000 toll-paying customers grossing $1,700,000, and handled 32 percent of all traffic crossing the river at Hartford.

CONSTRUCTION ACTIVITY



As Reported this week to ...
Engineering News-Record

CONTRACT VOLUME

Continental U. S. Only (Thousands of Dollars)

	Week of Oct. 23 1947	Cumulative 1947 (43 wks)	Cumulative 1946 (43 wks)
Federal	$6,454	$520,043	$530,299
State & Mun.	50,306	1,441,671	1,206,124
Total Public.	$56,760	$1,961,714	$1,736,423
Total Private	84,959	2,637,540	2,701,546
U. S. Total..	**$141,719**	**$4,599,254**	**$4,437,969**

WHERE CONSTRUCTION ACTIVITY ORIGINATED THIS WEEK

Dollar Volume (Thousands)

Type of Work	This Week	Cumulative 1947 (43 wks)	Cumulative 1946 (43 wks)
Waterworks ...	$2,381	$91,127	$93,906
Sewerage	2,777	113,909	93,751
Bridges	6,535	156,573	111,157
Highways	22,900	666,922	662,887
Earthwork, Waterways	4,219	247,098	292,127
Buildings, Public	14,278	477,680	340,089
Industrial ...	15,992	738,441	906,015
Commercial ..	54,539	1,541,285	1,621,444
Unclassified ...	18,098	566,219	316,593

NOTE: Minimum size projects included are: Waterworks and waterway projects, $22,500; other public works, $40,000; industrial buildings, $55,000; other buildings, $205,000.

NEW PRODUCTIVE CAPITAL

	Cumulative 1947 (43 wks)	Cumulative 1946 (43 wks)
NON-FEDERAL	Current	$1,263,808
Corporate Securities	figures	357,747
State and Municipal	not	681,061
Fed. Aid Highway.	available	225,000
FEDERAL		1,714,695
Total Capital $2,978,503		

ENR INDEX NUMBERS

Index Base = 100		1913	1926
Construction Cost.	Oct.'47	424.41	204.01
Building Cost.....	Oct.'47	320.58	173.30
Volume	Sept.'47	255.	112

CONSTRUCTION REPORTS

Bids Asked—Low Bidders—Contracts Awarded

Compiled by Business News Department—Engineering News-Record, 330 W. 42nd St., New York 18, N. Y.

ELSIE EAVES, Manager — *J. A. MAHONEY, Reports* — *E. R. BIGGERSTAFF, M. R. ROESSLER, Statistics*

WATER SUPPLY

Construction Reports received since this section went to press will be found in Last Minute Construction Reports.

BIDS ASKED

Bids Asked October 28

Ga., Savannah—City, water distr. mains, incl., 19,666 lin. ft. 42 in. steel pipe underground and 2,525 lin. ft. 42 steel pipe exposed, 3,398 lin. ft. 36 in. steel pipe underground. J. E. Sirrine & Co., Greenville, S. C., engrs. CD 4/11/46—ENR 5/5/46.

Mo., Marshfield—City, c/o City Clerk, WW sys. extens., imprvs. $60,000. Haegler & Co., Uptown Theatre Bldg., Rolla, engrs. CD 11/26/45—ENR 12/13/45.

N. C., Maxton—Town, C. M. Castevens, mayor, water and sewer extens. Paul N. Van Camp, Southern Pines, engr.

S. C., Orangeburg—City, 250,000 gal. steel water tank on tower. Plans deposit $10. Tomlinson Eng. Co., 1307 Marion St., Columbia, engr. CD 9/9/46—ENR 9/19/46.

Bids Asked November 1

Ont., Oil Springs—T. A. Evoy, village clk., 50 Imp. gal. deep well pump, starting and automatic control equip., 3,300 Imp. gal. elevated water storage tank, 9,100 ft. 4- to 8-in. c.i. pipe, 4,500 ft. 1- and 2-in. steel pipe, hydrants, etc. $45,000. CD 3/13/46—ENR 4/4/46.

Bids Asked November 5

Mich., Hastings—City, water lines and 2 elevated tanks. $250,000. Plans deposit $10. Jones & Henry, Security Bldg., Toledo, O., engrs. CD 6/16—ENR 6/6.

N. Y., New York—Bd. Water Supply, 120 Wall St., Contr. 368, furnishing, estmg., del. ferdam for stream control and cut-off wall for Downsville dam of the Pepacton reservoir on east branch Delaware River about 1 mi. upstream from Village of Downsville, Town of Colchester, Delaware Co. R. H. Burke, secy.; adv. ENR 10/23. CD 9/19—ENR 9/25.

N. Y., New York—Bd. Water Supply, 120 Wall St., Contr. 368, furnishing, testing, del. approx. 33,000 lb. steel pipes and fittings 3- to 12-in. in diam., with welding flanges and approx. 4,500 sq. ft. rubber linings and coverings 3/16 in. thick for Rondout, West Branch and Kensico South effluent chambers of Delaware Aqueduct. Plans deposit $5. R. H. Burke, secy.; adv. ENR 10/23.

N. C., Edenton—Town, Chn. Electric & Water Bd., Edenton, WW and electrical facilities, Sec. 3, switchgear equip. Plans deposit $20. Pierson & Whitman, Security Bank Bldg., Raleigh, engrs.

Bids Asked November 6

Mich., Detroit—C. M. Ziegler, comr. State Hy. Dpt., Lansing, deep water main at Fort and Eighth Sts., incl. 1,205 ft., 48 in. steel cylinder rein.-con. pressure pipe, 8- to 24-in. c.i. pipe gate valves, appurtenances, for City and State Hy. Dpt., Lansing. CD 7/12/44—ENR 7/27/44.

LOW BIDDERS

Calif., Sacramento—State Div. Architecture, P. Wks. Bldg., Oct. 14, water supply and sewage plant imprvs., at Fricot Ranch School for Boys, approx. 10 mi. east of San Andreas, from Ferguson Bros., 10524 Grafflan St., Oakland. $81,385. CD 10/2.

Calif., San Francisco—Public Utilities Comn., City Hall, Oct. 14, collecting lines at Pleasanton Wells and relocating portion Pleasanton pipeline, Spec. 466, from M. J. Lynch, 3251 Revere Ave. $29,190.

Ia., LeClaire—City, L. V. Mohr, clk., rejected bids Sept. 10, WW and distr. sys., incl. well, pump, pumphouse, water storage facilities, distr. mains, etc. Over $30,000. R. W. Gearhart, 349 21 St. S. E., Cedar Rapids, engr. CD 8/20—ENR 8/28.

Ill., Nauvoo—City, Oct. 6, water purification plant with auxiliaries, appurtenances, watermain extens., etc., from Rees Constr. Co., Quincy. $130,097. CD 9/18—ENR 9/25.

Tex., Dallas—City, Oct. 8, Bachman Water Plant addn., imprvs., Contr. 135-F, from J. G. Bartholomew, 311 Construction Bldg. $815,355. R. E. Morris, Sr., c/o Waterworks Eng. Dpt., engr. CD 9/25.

CONTRACTS AWARDED

Ga., Lagrange—City, WW imprvs., incl. river intake, pump. station and supply line, to Ledbetter-Johnson, Rome, $49,427 and $63,998 respectively; storage reservoir, to J. R. Newman, Lagrange, $31,700. Grand total $145,125. Bids 10/15. CD 9/19—ENR 9/25.

Mich., East Lansing—City, one 250,000 gal. elevated steel tank, to Chicago Bridge & Iron Co., 332 S. Michigan St., Chicago, Ill., $37,100; 2 pumps, to Wm. A. Dalee, Inc., 9190 Roselawn Ave., Detroit, $14,000. CD 9/25.

Mich., Northville—Mayburn Santorium, Northville, erecting 75,000 gal. elevated steel tank, to Pittsburgh-Des Moines Steel Co., 33 S. Dearborn St., Chicago, Ill. $42,300. CD 7/2/46—ENR 7/11/46.

†N. M., Los Alamos—U. S. Eng., P. O. Box 1538 Albuquerque, drilling three 20 in. wells to serve Los Alamos Atomic Energy Project, to Layne-Western Co., 1010 W. 39 St., Kansas City, Mo. $278,000. Awarded 10/7.

Tex., Marshall—City, E. E. Justice, secy., Sect. C, 75,000 lin. ft. 20 and 24 in. concrete water supply pipeline, to J. O. Parrot & H. C. McDonald, Tower Petroleum Bldg., Dallas. $658,102. Bids 9/25, awarded 10/7. CD 10/6—ENR 10/9, under LB.

Wash., Grand Coulee—City, City Hall, 2 storage reservoirs and 1 booster pump plant to Pacific Bridge Co., 333 Kearny St., San Francisco, Calif. $53,500. CD 7/30/45—ENR 8/2/45.

SEWERS, WASTE DISPOSAL

Construction Reports received since this section went to press will be found in Last Minute Construction Reports.

BIDS ASKED

Bids Asked October 27

Md., Towson—Bd. Comrs. Baltimore Co., C. H. Kahl, pres., Courthouse, Gwynns Falls Intercepting Sewer, Contr. 114-5 approx. 29,148 ft. 30 and 33 in. cement asbestos pipe, appurtenances from existing 30x33 in. rein.-con. sewer at Baltimore City line, in vicinity of Gwynn Oak and exten. along valley of Gwynns Falls to point south of Old Court Rd., 1, 2 and 3 Election Dists. Plans deposit $25. G. Douglas Andrews, Courthouse, ch. engr.

Bids Asked October 28

Mich., Reed City—City, Mrs. A. Hesselsweet, clk., sewers, incl. 18,846 lin. ft. 8- to 18-in. concrete or vitr. clay pipe, manholes and connections. Consoer, Townsend & Assoc., 57 Paw Paw Ave., Benton Harbor, engrs.

Bids Asked October 30

Ga., Summerville—City, c/o mayor, Summerville, sanitary sewer imprvs. Over $40,000. Plans deposit $25. J. B. McCrary Eng. Corp., 22 Marietta St. Bldg., Atlanta, engr.

Bids Asked November 4

Calif., Oakland—City, City Hall, Unit 1 of 23 Ave., sewage separation project. $327,000. Plans deposit $5. Walter N. Frickstad, City Hall, city engr. CD 5/16/45—ENR 5/31/45.

Miss., Raymond—Town c/o mayor, sanitary sewer imprvs. and sewage treatment plant. Over $40,000. Plans deposit $15. W. E. Johnson, First Federal Savings & Loan Assn. Bldg., Jackson, engr.

Bids Asked November 6

La., Baton Rouge—East Baton Rouge Police Jury, Courthouse, sanitary sewerage sys. for Sewerage Dist. 6-A. Plans deposit $25. Frederick E. Smith, 300 A-Dalrymple Dr., engr. CD 7/30—ENR 8/7.

La., Baton Rouge—East Baton Rouge Police Jury, Courthouse, 2 sewage lift stations, Dist. 8. Frederick E. Smith, 3000 A Dalyrmple Dr., Engr. CD 7/21/44—ENR 8/10/44.

Bids Asked November 7.

N. J., Trenton—Ewing Twp., Pennington Rd., Trenton, incinerator plant. $55,000. Micklewright & Mountford, 72 Ewing St., archts. Louis T. Klauder & Assoc., Lincoln Liberty Bldg., engrs. CD 12/12—ENR 12/26

Bids Asked November 12

Calif., Los Angeles—Los Angeles Co. Sanitation Dist. 5, 1206 Maple Ave., Lomita Trunk Sewer Exten. 2, from Lomita Trunk Sewer Exten. 1 at Pennsylvania Ave. and Lomita Blvd. to Hawthorne and 238 St. $120,000.

Bids Asked November 17

Minn., Foley—Village, L. A. Grimm, clk., sewage treatment plant. $80,000. Plans deposit $15. Banister Eng. Co., 1549 University Ave., St. Paul, engr.

LOW BIDDERS

Del., Wilmington—President Levy Court New Castle Co., Pub. Bldg., Zone 23, Oct. 14, approx. 37,000 lin. ft. sanitary sewers in Gwinhurst, Silverside Heights and Holly Oak Terrace in Brandywine Hundred, from James Julian, S. DuPont Rd., Elsmere, Wilmington, $226,196. Est. $292,000. CD 9/25—ENR 10/2.

La., Baton Rouge—East Baton Rouge Police Parish Jury, Baton Rouge, rejected bids Sept. 5, sanitary sewerage sys. for Sewerage Dist. 9. L.B. $126,627. CD 9/17—ENR 9/25, under LB.

Mo., University City (St. Louis, 5, P.O.)—City, A. J. Schopo, clk., City Hall, Oct. 7, River Des Peres Foul Water Interceptor Public Sewer, Proj. 290, between North and South Rd., and 82 Blvd., with lateral interceptors, manholes, appurtenances, from E. J. Fischer, 4134 Westminster Pl., St. Louis, Zone 8 $89,998. Est. $93,628. CD 10/1.

O., Elyria—City, rejected bids Sept. 12. Contr. K, 5,800 ft. 36 in. storm sewer. L.B. $84,661. New bids 10/16. CD 10/3—ENR 10/9

Tex., Dallas—City, Oct. 8, East Bank Interceptor Sewer, Sect. 2, Contr. 148-B, from P. C. Sorenson, 613 Southland Life Bldg., Sect. A $889,272 and Sect. B $866,893. CD 9/17—ENR 9/25.

Tenn., Mt. Pleasant—Town, Oct. 9, sanitary sewerage sys. and sewage treatment plant, from G. E. Moore Co., Greenwood S. C. $278,495. CD 9/29—ENR 10/2.

Tex., Forth Worth—City, W. O. Jones, mgr., sanitary sewer laterals in West Ridglea Addn., from Joe Bland Constr. Co., 3608 E. 1st St., Austin, $53,900. Est. $66,000. C. M. Thelin, dir. P. Wks. CD 9/18.

Tex., Snyder—City, Oct. 8, sanitary sewerage sys. extens. and concrete, brick pumphouse from Wilks, Dake & Steed, Box 575, Tyler, vitr. clay pipe, $47,096 or concrete pipe $46,838. Est. $50,000. CD 9/29.

Wash., Vancouver—City, City Hall, rejected bids Sept. 10, treatment plant and 3 pump stations. $360,000. Will re-advertise. M. E. Ray, city engr. CD 9/17—ENR 9/25.

Wis., Wauwatosa—Metropolitan Sewerage Comn. of Milwaukee Co., Milwaukee, Zone 1, Oct. 14, 2,171 ft. special sect. concrete main sanitary sewer in Menanonee River Dr., from R-W Constr. Co., 4831 W. State St., Milwaukee, Zone 8. $194,008. CD 10/1—ENR 10/9.

CONTRACTS AWARDED

O., Columbus—City, sewage treatment works imprv., Contr. 40, rein.-con. tank, Contr. 41, modification of air diffuser equip., to Bass Engr. Construction Co., 208 Hanna Bldg., Birmingham, Mich. $828,315. CD 9/2—ENR 9/11, under LB.

O., Cleveland—City, City Hall, Big Creek Sewer from W. 117 St. to approx. 700 ft. easterly, to C. B. Moon Co., 3424 Carnegie Ave. $178,443. Awarded 10/11. CD 9/24—ENR 10/2, under LB.

PROJECTS COVERED

Projects—By Size

Construction projects here reported cover the United States and Canada, are of these minimum sizes or larger: water supply, earthwork, waterworks $22,500; other public works $40,000; industrial buildings $55,000; other buildings $205,000.

Classes of Construction

(Name in order of Listing)

Water Supply	Latin America
Sewers, Waste Disposal	Public Buildings
Bridges	Commercial Buildings
Streets & Roads	Industrial Buildings
Earthwork, Waterways	

Unclassified

Stages Reported

PROPOSED WORK: Including appointment of engineers or architects.

BIDS ASKED (new announcements only). For full calendar, see also preceding issues of ENR.;

LOW BIDDERS: On jobs below $500,000 value all low bidder news will be the final reports published on the projects involved except where award is not made to the low bidder. In this case, a supplementary contract award report will be published.

CONTRACTS AWARDED: Except awards to low bidders previously reported in low bidder stage.

Dates shown are of issue in which last previous report was published.

Symbols and Abbreviations Include:

†	Federal Government
●	Project of $1,000,000 or over.
ENR	Engineering News-Record
CD	Engineering News-Record Construction Daily